

UNDERSEA WARFARE RESEARCH OPPORTUNITIES

- Operational Oceanography
- Shallow Water Signal Processing
- Marine Mammal Bio Acoustics
- Acoustic Mine Detection
- Tactical Decision Making Under Uncertainty
- Underwater Detection and Surveillance
- Antisubmarine Warfare Research
(This replaces Fluid Dynamics of Underwater Weapons.)
- Low Frequency Array Modeling
- Mine Countermeasures, Mine Warfare
- Digital Signal Processing
- Autonomous Ocean Robotics, Vehicles, and Unmanned Systems

"The versatile nature of this program has allowed me to pursue a course of study tailored to my own interests with relevance to both my professional military career and the challenges that lie beyond."

*LT Robert Hill, USN
USW Student, September '03
Graduate*

The Naval Postgraduate School is located in the beautiful Monterey area. This is a great place to live!



There are many good schools; military housing is available, and recreational activities are limitless.

CONTACT INFORMATION

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UNDERSEA WARFARE



MASTER OF SCIENCE DEGREE CURRICULA

*Educating officers in the core
scientific concepts that govern
Undersea Warfare*



NAVAL POSTGRADUATE SCHOOL

THE USW PROGRAM

THE PROGRAM

The Undersea Warfare (USW) curriculum focus is engineering fundamentals, physical principles, operations research and systems analysis that contributes to USW (antisubmarine and mine warfare (ASW/MIW)) operational employment. The program is interdisciplinary with specialization in:

Engineering Acoustics

(emphasis on underwater acoustics and weapons effects)

Physical Oceanography

(emphasis on factors affecting acoustic surveillance and detection)

Operations Research

(emphasis on tactical applications and decision analysis)

Electrical Engineering

(emphasis on signal processing)

Unmanned Systems

Academic Year 2006

Applied Science

(with majors in oceanography, operations research, signal processing, and acoustics)



"Mine Warfare, perhaps more than any other single littoral warfare mission area, is the 'key' that will unlock the 'door' to the littoral battlespace."

ADM J. M. Boorda, CNO - 1995



MASTERS DEGREES IN THE USW PROGRAM

AVAILABLE MASTERS DEGREES

Each of the supported Masters Degrees in the USW program require eight quarters (2 years) of academic challenges, including thesis research with direct application to current problems of interest to the Navy and the Department of Defense. Some one-year Immediate Graduate Education Program (IGEP) billets are available.

Your Master of Science Degree can be in one of the following accredited degree programs:

- Engineering Acoustics
- Physical Oceanography
- Operations Research
- Electrical Engineering (signal processing)
- Master of Science in Engineering Science (MSES) in Unmanned Systems (scheduled AY2006)
- Applied Science

PREREQUISITES

A baccalaureate degree or equivalent from a program with a calculus sequence and a calculus-based physics sequence that results in an Academic Profile Code (APC) of 323 is required for direct input.

GRADUATION

Upon graduation you will be equipped with strong technical and engineering skills to succeed in your profession. Your degree will further develop your

"Tomorrow's force requires experts across the full spectrum of Naval operations, from warfare areas such as undersea warfare, to various engineering and technology curricula."

VADM Donald and RADM Sullivan
(COMNAVSUBFOR 291209Z July 04)

FREQUENTLY ASKED QUESTIONS

CAN I COMPLETE JOINT PROFESSIONAL MILITARY EDUCATION (JPME) PHASE I WHILE AT NPS?

Yes. JPME is integrated into the USW program. Naval War College faculty are on-site to allow for completion of the four required courses,

- Strategy and Policy
- National Security Decision Making
- Joint Maritime Operations Part 1
- Joint Maritime Operations Part 2

WHEN CAN I START?

Entry dates are in spring and fall (April and October).

WHAT CAN I DO TO BE PREPARED?

A newly implemented ASW Certificate program allows early preparation for the USW program at NPS. The ASW Certificate is delivered via distance learning. For more information about the ASW Certificate Program, go to:

<http://www.nps.navy.mil/usw>

"...I believe that to successfully conduct USW operations requires a fundamental knowledge of four basic disciplines: oceanography, (characterize the ocean environment), physics (underwater acoustics), operations research (search and detection theory), and electrical engineering (signal processing)."

Professor Emeritus Bob Bourke
Former Chair, Oceanography Dept.
Founding Member, ASW/USW
Academic Group at NPS

